AL

THIRD TRIENNIAL
REPORT ■ 1989
PART II
Alberta Heritage
Foundation for
Medical Research

# ON THE EDGE OF DISCOVERY

# ON THE EDGE OF DISCOVERY

## PART II

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This second part of the 1989 Triennial Report contains statistics and financial summaries for the Foundation's operations from 1986-89. It also contains the Auditor's Report for 1988-89. Details of Foundation activities, lists of scientists supported and descriptions of their research are found in Part I.

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Alberta Heritage
Foundation for
Medical Research

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# Letter from the Chairman

On behalf of the Trustees, I have the pleasure of presenting the Foundation's Ninth Annual Report for the year ended March 31, 1989 together with the Third Triennial Report covering the three years ended March 31, 1989.

These reports convey impressive evidence of the accomplishments of Alberta's medical scientific community which are a source of pride to all Albertans.

Total expenditures by the Foundation for the year ended March 31, 1989 amounted to $37.5 million compared to $51.2 million in the preceding year. Significant expenditures were made in each year for the completion of medical research buildings in Edmonton and Calgary ($5.0 million in 1989 and $17.1 million in 1988). Expenditures on the broad range of regular programs, after elimination of building program grants, amounted to $32.5 million in 1989 compared to $34.1 million in 1988, a reduction of $1.6 million in 1989. As noted in my letter accompanying last year's report, expenditures for regular scientific programs were reduced by $2.7 million in 1988 which, in turn, followed a reduction of $3 million in 1987. These reductions are expressed in constant dollars; on an inflation-adjusted basis the actual effect would, of course, be somewhat greater than shown.

The comments made in last year's Chairman's letter about such reductions deserve attention again this year. The Trustees believe that program expenditures must be based on a prudent spending rate which recognizes the need to preserve the capital base of the Foundation to ensure the integrity of our existing scientific programs. Spending which exceeds prudent guidelines will impair ultimately our ability to support adequately the work of Foundation-funded scientists with particular reference to the current and planned multidisciplinary medical research groups. We are determined that this will not happen.

An examination of current spending inevitably leads to consideration of the value of the Foundation's Endowment Fund Assets from which income is derived to fund current programs. The status of the Endowment Fund Net Assets at March 31 for each of the last four years is set out in the following tabulation:

**Endowment Fund Net Assets at March 31**
(millions of dollars)

| | **1989** | **1988** | **1987** | **1986** |
|---|---|---|---|---|
| At Cost | 456 | 447 | 449 | 443 |
| At Market Value | 472 | 483 | 529 | 515 |

While the Endowment Fund Net Assets on a cost basis have been maintained at a relatively steady level, there has been a reduction in their market (realizable) value attributable almost entirely to the high level of interest rates in Canada over the last two years which has tended to depress the market value of the government and government-guaranteed debt instruments, which represent a significant part of Endowment Fund assets. In the future, one of two things must occur: either the spending rate will have to decrease in a moderate and systematic manner consistent with our principal objectives or the Endowment Fund must be supplemented. In previous Annual Reports reference has been made to our regular appearances before the Special Committee on the Heritage Savings Trust Fund. On each appearance in recent years we have stressed the importance of dealing with the important issue of supplementation and this matter will again be raised in our 1989 submission.

There has been one noteworthy new development relating to the Foundation's programs.

The Foundation has entered into an agreement with the Minister of Technology, Research and Telecommunications providing for the establishment of the Alberta Medical Innovations Program. This important new program has been established to advance medical research and its application for the improvement of health care in Alberta. The program includes advancing medical-pharmaceutical research for commercial use by supporting clinical trials, testing, marketing and manufacturing, and establishing a program to train and develop scientists and business experts in health-related industries. The total available

funding will be $9.332 million over a five year period beginning in the 1988/89 fiscal year. This new program can be regarded as a logical extension to the Foundation's existing Technology Transfer program.

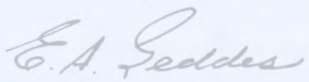
This will be the last report which I will be submitting on behalf of the Trustees. My term and that of the other remaining founding Trustees – Dr. Gordon Swann and Hon. Mr. Justice Michael O'Byrne – will expire in March of 1990. A great deal is owed to these individuals who have served the Foundation with a deep sense of commitment over the ten years from inception. Their contributions to the Foundation have added greatly to its success, particularly in the earlier formative years.

The Trustees believe that the programs of the Foundation have been responsive to the needs of Alberta's medical research community and that they have been administered in an effective way which has given academic leaders the flexibility to make planning decisions with the conviction that the Foundation's processes will allow thorough examinations of proposals and decisions within appropriate time constraints.

To ensure that the Foundation continues to fulfill its statutory role in the Province of Alberta and to remain completely responsive to medical research needs, I will be asking the Trustees to embark upon a process of re-evaluation as we complete the first decade of operations. Such re-evaluation will include a thorough review of the financial management principles of our Endowment Fund in the light of the experience we have gained over ten years. Another central consideration will be our relationships with those in positions of leadership in Alberta's universities and affiliated institutions, upon whom we rely for maintaining a vigorous approach to ensure that we do not become complacent.

The decisions made by the Foundation are based upon the valuable advice and direction of the many distinguished individuals in the scientific community who serve the Foundation in an advisory capacity.

We would like to record our deep appreciation of the work of our President, Lionel McLeod, who has provided inspiration and leadership to us all. In addition, our thanks go to the members of the Foundation's staff who have served with uncommon dedication at all times.



Eric A. Geddes

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*__Leroy Harding le Riche, M.B., Ch.B.__, Registrar, College of Physicians and Surgeons, Edmonton
**The Hon. Mr. Justice Michael Brien O'Byrne**, Court of Queen's Bench, Edmonton, Alberta
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**Arthur F. Wilson, M.D.**, Edmonton

*Term ended April 1, 1988

# The President's Report

This Third Triennial (and Ninth Annual Report) outlines a mixture of very spectacular accomplishments: strengths in basic and fundamental research essential to the production of that new knowledge crucial to the prevention of disease, clinical and applied research relating new knowledge to the problems of patients, and initial success transferring new ideas and concepts into commercial ventures. A major investment made in 1979 by the Government of the Province of Alberta has succeeded and well beyond the expectations of those of us working in academic centres prior to the advent of the Foundation.

By building on Alberta's existing and readily developable strengths and using both multidisciplinary and peer review, high quality development proceeded rapidly and with far reaching effects. The excitement, competitiveness and the rapid progress attracted well-trained investigators, and very bright young people to training programs. The entire medical research community was reinvigorated with new staff and funding for training programs and updating equipment.

More than 140 new investigators have been recruited and established in Alberta. Some disciplines are staffed almost entirely by Foundation-funded personnel. To gain synergy, efficiency and the cross-fertilization of ideas, the Foundation has encouraged the creation of multidisciplinary research groups. To facilitate development and after careful studies of need, the Foundation, using infrastructure grants, funded two new laboratory buildings (one at the University of Alberta, and the other at The University of Calgary). Both were completed on time and within budget.

Investigators occupying these new laboratories have been generous in their praise, offering strong commendation for the design and the timeliness of construction. Each building contains modest reserves of unfinished space for future development.

Our investigators are highly productive. Each regularly contributes important new information to prestigious publications, conferences and congresses attracting recognition for our province and ensuring a world wide two-way flow of new information and ideas.

The quality of the research attracts not only the interests of the world's scientific community but also – new funding. Funding by agencies such as the Medical Research Council of Canada, other federal granting agencies, and a full range of volunteer agencies is growing steadily. External funding of the two Faculties of Medicine, for example, has increased from approximately $9 million per year to over $31 million since the advent of the Foundation. Seven new research groups established within the two Heritage Medical Research Buildings bring to our province over $4 million annually.

Through training programs, Alberta makes key contributions to tomorrow's desperately needed complement of medical scientists. Since 1980, a total of 2900 Students and Fellows have been supported. Responding to a very critical personnel deficiency, a special training program and a unique faculty-level program was designed and implemented: the Clinical Fellowship and Clinical Investigatorship programs. The number of physicians, surgeons and other specialists training in research is increasing quickly with some now returning to Alberta as Clinical Investigators. Alberta has led the way as the Medical Research Council of Canada and other agencies are now implementing programs with similar objectives.

By attracting both clinical and basic scientists with special expertise, major contributions have been made to Alberta's patient care programs. Indeed, in the past five years, most new programs have been developed and supported largely by Foundation-funded investigators. The Alzheimer's Clinic in Calgary, the Islet Cell Transplantation program in Edmonton, diagnostic and therapeutic investigations of cardiac arrhythmias in both cities, the introduction of nuclear magnetic imaging to Alberta, new initiatives in the rehabilitation of stroke patients, the management of bladder incontinence in the elderly, therapy for autistic children, expertise in infectious disease and AIDS are good examples of the kinds of programs that underscore the Foundation's support for applied and clinical research and new patient care programs.

The success of a two year experimental program for the transfer of technology to commercial ventures has encouraged the Ministry of Technology, Research and Telecommunications to expand this program by providing funds for more advanced development. Innovations supported by the present program have helped attract investment from two pharmaceutical firms, one from the United Kingdom and one from Japan Not all projects have survived but for a high risk program, a very promising number are winning or progressing favorably.

Despite these outstanding accomplishments, well documented in the report of the first International Board of Review, the Foundation confronts a vexing array of problems. By establishing an endowed foundation to advance medical research in Alberta, the government responded to a central requirement for solid progress; long-term stable funding. This has attracted top quality scientists and trainees to Alberta. To maintain their morale and motivation, stable funding must be assured into the next century. The endowment must now be increased or the annual spending rate constrained and even reduced over time to protect the purchasing power of the endowment against inflation.

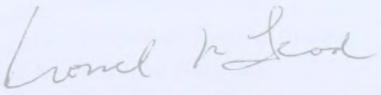
While the outstanding productivity of Alberta's scientists does attract increasing amounts of funding from other sources, the Foundation is the agency best positioned to deal efficiently and effectively with a range of requirements arising from the success of the past nine years. To exploit fully our present advantage, a modest number of new scientists must be recruited annually; firstly to consolidate a number of highly promising multidisciplinary research groups and then to provide a continuing inflow of well trained young scientists to ensure the continuing vigor of Alberta's medical research. A supportive research environment will require further annual investment to update new technological advances and to ensure rapid information exchange with the rest of the scientific world.

If Alberta is to maintain and improve the quality of patient care programs, they must be carefully and accurately evaluated for quality and cost benefit. Epidemiological and health care research must be developed to do this. Contemporary patient care requires beneficial innovations, but diffusion of new technology must be better justified than it is presently. New investigators must be trained and recruited to do this because there is a scarcity of people with the expertise. Again, the Foundation is well-positioned to undertake this task.

How Alberta will respond to these pressures and opportunities will greatly influence our province's importance to medical research. Failure to respond positively and aggressively will signal unwillingness to remain on the leading edge of research and patient care and reduce the province's attractiveness to the best and brightest scientists and their trainees; both those from within and without the province!

The Foundation, a well thought-out plan implemented by the Government of the Province of Alberta, has achieved enviable success but it needs further support, urgently, if our province is to harvest fully the potential generated by this success. Alberta's medical science and increasingly its medical technologies, are highly competitive but the edge and momentum will be lost if the direction of the past nine years is not pursued with vigor.

Once again, and with respect and admiration, I acknowledge the many people who have made very important contributions to the success of the Foundation's programs: the international scientific community for its counsel and its assistance in reviewing applications, the Trustees for their unfailing support, and to the staff that accomplishes so much so willingly.



Lionel E. McLeod, M.D.

**OFFICERS OF AHFMR**

**President:** Lionel E. McLeod, M.D. F.R.C.P.
**Financial Officer:** Alex J. Nykolyn, C.A.

# Scientific Advisory Council

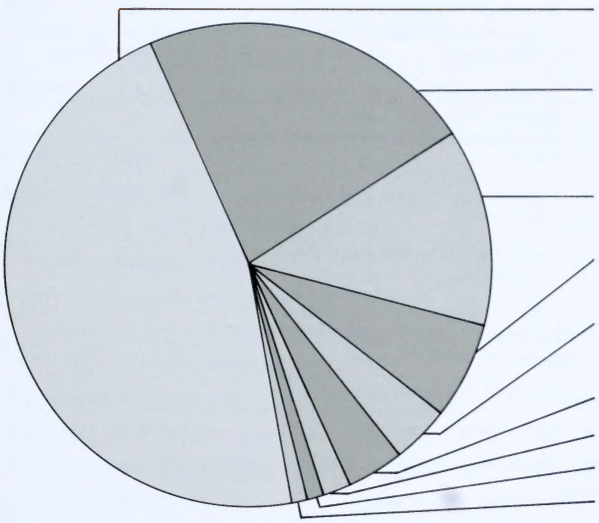
The 13-member Scientific Advisory Council includes representatives from the national and international research communities. They review and advise the Foundation on major applications and policy decisions related to research. The members are:

**Dr. Lionel E. McLeod**, President, Alberta Heritage Foundation for Medical Research
**Dr. Harold L. Atwood**, Professor and Chairman, Department of Physiology, University of Toronto, Toronto, Ontario
**Professor H. John Evans**, Director, MRC Clinical and Population Cytogenetics Unit, Western General Hospital, Edinburgh, Scotland
**Dr. Wolfgang K. Joklik**, Chairman, Department of Microbiology and Immunology, Duke University Medical Centre, Durham, North Carolina
**Dr. Laurence A. Harker**, Blowmeyer Professor and Director Hematology/ Oncology, Emory University, Atlanta, Georgia
**Dr. Lloyd D. MacLean**, Edward W. Archibald Professor, Chairman, Department of Surgery, McGill University, Montreal, Quebec
**Dr. Joseph B. Martin**, Dean, School of Medicine, University of California, San Francisco
**Dr. Antony H. Melcher**, Vice-Provost, University of Toronto, Toronto, Ontario
**Dr. I. Barry Pless**, Professor of Pediatrics and Epidemiology, McGill University, Montreal, Quebec
**Dr. Daniel Porte, Jr.**, Associate Chief of Staff for Research and Development, Head, Division of Endocrinology and Metabolism, University of Washington, Seattle, Washington
**Dr. Aser Rothstein**, former Professor of Medical Biophysics, Director of Medical Research Institute, The Hospital for Sick Children, Toronto, Ontario
**Dr. Bishnu D. Sanwal**, Professor, Department of Biochemistry, The University of Western Ontario, London, Ontario
**Dr. René Simard**, Vice-President Academic and Research, Université de Montréal, Montreal, Quebec

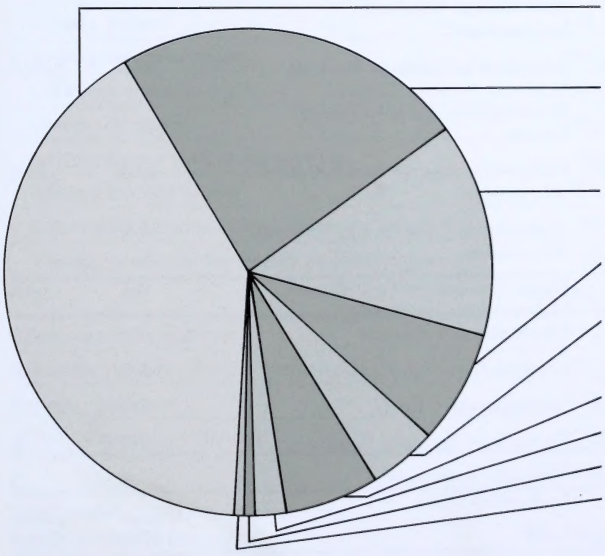
## Past-Members

(Terms ended in 1988)

**Dr. Lawrence E. Bryan**, Professor and Head, Department of Microbiology and Infectious Diseases, Faculty of Medicine, University of Calgary, Calgary, Alberta
**Sir Alastair Currie**, former Professor Pathology, Edinburgh University, and Pathologist, Royal Infirmary of Edinburgh, Scotland
**Dr. David M. Kipnis**, Busch Professor of Medicine, Chairman, Department of Medicine, Washington University School of Medicine, St. Louis, Missouri
**Dr. Robert G. Lee**, Professor and Head, Department of Clinical Neurosciences, Foothills Hospital, Calgary, Alberta
**Dr. Hugh O. McDevitt**, Professor and Chairman, Department of Medical Microbiology, Stanford University School of Medicine, Stanford, California
**Dr. James V. Maloney, Jr.**, Louis D. Beaumont Professor of Surgery and Associate Dean, Department of Surgery, UCLA School of Medicine, Center for the Health Sciences, Los Angeles, California
**Dr. David L. Sackett**, Professor, Departments of Clinical Epidemiology and Biostatistics and Medicine, McMaster University, Hamilton, Ontario
**Dr. David L. Tyrrell**, Chairman, Department of Medical Microbiology and Infectious Diseases, University of Alberta, Edmonton, Alberta

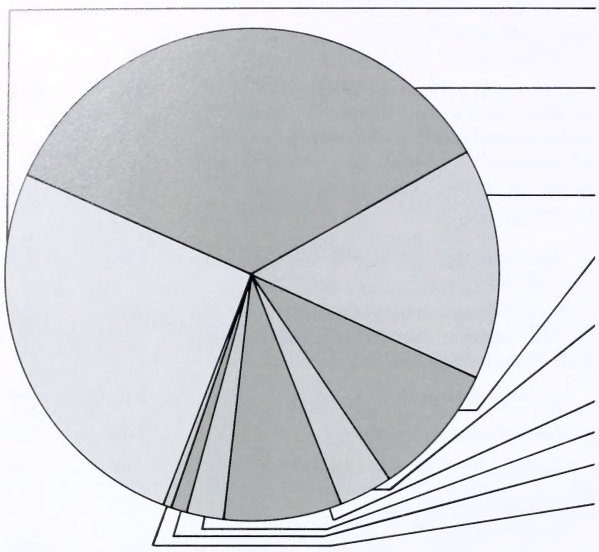


| AHFMR Expenditures 1986-87 | $ Millions | % |
|---|---|---|
| Research Support Costs and Institutional Grants to Universities** | 26.4 | 45.0 |
| Scholarship/Heritage Medical Scientist Awards, Clinical Investigators, Establishment Grants | 13.1 | 22.4 |
| Fellowship Awards and Research Allowances | 7.9 | 13.5 |
| Studentship Awards and Research Allowances | 3.8 | 6.6 |
| Major Equipment Grants and Maintenance (excluding Establishment Grants) | 2.5 | 4.3 |
| General Research Grants* | 2.6 | 4.4 |
| Administrative Costs | 1.1 | 1.9 |
| Technology Transfer Grants | .6 | 1.0 |
| Scientific Policy and Evaluation Costs | .5 | .8 |
| | **58.5** | **100.0** |

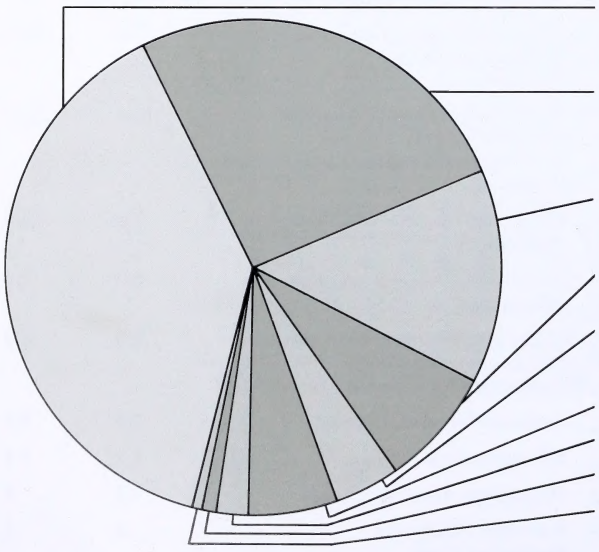


| AHFMR Expenditures 1987-88 | $ Millions | % |
|---|---|---|
| Research Support Costs and Institutional Grants to Universities** | 21.0 | 41.0 |
| Scholarship/Heritage Medical Scientist Awards, Clinical Investigators, Establishment Grants | 12.1 | 23.7 |
| Fellowship Awards and Research Allowances | 7.2 | 14.0 |
| Studentship Awards and Research Allowances | 3.7 | 7.3 |
| Major Equipment Grants and Maintenance (excluding Establishment Grants) | 2.3 | 4.4 |
| General Research Grants* | 3.3 | 6.5 |
| Administrative Costs | 1.2 | 2.3 |
| Technology Transfer Grants | .2 | .4 |
| Scientific Policy and Evaluation Costs | .2 | .4 |
| | **51.2** | **100.0** |

* Conference Grants, Visiting Scientists, Visiting Lecturers and Faculty Travel, Independent Establishment Grants, Independent Research Allowances, Special Initiative Funding, Visiting Professorships and Clinical Traineeships.
** Includes Institutional Grants for planning and construction of new research buildings.



| AHFMR Expenditures 1988-89 | $ Millions | % |
|---|---|---|
| Research Support Costs and Institutional Grants to Universities** | 9.7 | 25.9 |
| Scholarship/Heritage Medical Scientist Awards, Clinical Investigators, Establishment Grants | 13.1 | 35.0 |
| Fellowship Awards and Research Allowances | 5.7 | 15.2 |
| Studentship Awards and Research Allowances | 3.2 | 8.6 |
| Major Equipment Grants and Maintenance (excluding Establishment Grants) | 1.3 | 3.5 |
| General Research Grants* | 2.9 | 7.8 |
| Administrative Costs | 1.1 | 2.9 |
| Technology Transfer Grants | .3 | .8 |
| Scientific Policy and Evaluation Costs | .1 | .3 |
| | **37.4** | **100.0** |



| AHFMR Expenditures 1986-89 | $ Millions | % |
|---|---|---|
| Research Support Costs and Institutional Grants to Universities** | 57.1 | 38.8 |
| Scholarship/Heritage Medical Scientist Awards, Clinical Investigators, Establishment Grants | 38.3 | 26.0 |
| Fellowship Awards and Research Allowances | 20.8 | 14.2 |
| Studentship Awards and Research Allowances | 10.7 | 7.3 |
| Major Equipment Grants and Maintenance (excluding Establishment Grants) | 6.1 | 4.1 |
| General Research Grants* | 8.8 | 6.0 |
| Administrative Costs | 3.4 | 2.3 |
| Technology Transfer Grants | 1.1 | .8 |
| Scientific Policy and Evaluation Costs | .8 | .5 |
| | **147.1** | **100.0** |

* Conference Grants, Visiting Scientists, Visiting Lecturers and Faculty Travel, Independent Establishment Grants, Independent Research Allowances, Special Initiative Funding, Visiting Professorships and Clinical Traineeships.
** Includes Institutional Grants for planning and construction of new research buildings.

# Summary of the Financial Statements for the 3 Years Ending March 31



| | 1989 | 1988 | 1987 |
|---|---|---|---|
| **REVENUE** | | | |
| Transfers from the Alberta Heritage Foundation for Medical Research Endowment Fund | $34,000,000 | $58,000,000 | $53,000,000 |
| Interest | 777,015 | 894,610 | 756,826 |
| | **34,777,015** | **58,894,610** | **53,756,826** |
| **EXPENDITURE** | | | |
| Scientific Programs: | | | |
| Scholarship and establishment grants | 8,423,057 | 8,558,838 | 9,368,187 |
| Building program grants | 5,068,530 | 17,099,290 | 21,726,500 |
| Fellowship grants and research allowances | 4,415,232 | 5,587,655 | 6,448,950 |
| Studentship grants and research allowances | 3,175,545 | 3,721,790 | 3830,499 |
| Heritage medical scientist grants | 2,869,548 | 1,954,393 | 2,447,231 |
| Research support costs | 2,467,467 | 2,523,851 | 2,581,670 |
| Clinical investigatorship grants | 1,838,173 | 1,653,267 | 1,290,973 |
| Independent establishment grants | 1,572,835 | 1,734,557 | 1,053,357 |
| Institutional grants | 1,391,615 | 960,106 | 2,126,546 |
| Clinical fellowship grants | 1,289,717 | 1,597,927 | 1,437,739 |
| Major equipment and maintenance grants | 1,270,681 | 2,292,672 | 2,498,884 |
| Technical workshop grants | 506,928 | 181,900 | – |
| Special initiative grants | 419,705 | 442,636 | 444,253 |
| Technology transfer grants | 323,336 | 185,049 | 584,800 |
| Visiting lecturer grants to universities | 312,868 | 362,346 | 316,067 |
| Travel grants to universities | 249,203 | 246,269 | 216,188 |
| Library grants | 144,571 | 118,300 | – |
| Visiting scientist grants | 128,712 | 159,876 | 101,352 |
| Conference support grants | 113,790 | 129,657 | 292,455 |
| Computer grants | 100,000 | 100,000 | – |
| Independent research allowances | 45,945 | 98,614 | 125,515 |
| Clinical trainee grants | 34,500 | – | 10,564 |
| Recruitment and planning grants to universities | 20,613 | 30,889 | 21,942 |
| Visiting professor honoraria and travel grants | 4,938 | 9,250 | 6,716 |
| | **36,187,509** | **49,749,132** | **56,930,388** |
| Administration expenses | 1,076,110 | 1,064,812 | 1,111,101 |
| Scientific Advisory Council expenses | 52,331 | 139,827 | 114,001 |
| Trustee expenses | 109,413 | 112,647 | 127,757 |
| Other committee expenses | 95,970 | 100,748 | 230,469 |
| | **37,521,333** | **51,167,166** | **58,513,716** |
| Excess (deficiency) of revenue over expenditure for the year | **$(2,744,318)** | **$7,727,444** | **$(4,756,890)** |

# Balance Sheets as at March 31

| | 1989 | 1988 | 1987 |
|---|---|---|---|
| **ASSETS** | | | |
| Cash | $5,669,641 | $6,282,595 | $3,108,083 |
| Accounts receivable | 369,250 | 227,764 | 214,563 |
| Advances and prepaid expenses | 231,685 | 2,005,784 | 14,985 |
| Mortgages receivable from research scientists | 504,261 | 542,595 | 619,200 |
| Fixed assets | 138,480 | 184,363 | 232,470 |
| | **$6,913,317** | **$9,243,101** | **$4,189,301** |
| **LIABILITIES AND SURPLUS** | | | |
| Accounts payable | $1,763,876 | $1,349,342 | $4,022,986 |
| Revenue surplus | 5,149,441 | 7,893,759 | 166,315 |
| | **$6,913,317** | **$9,243,101** | **$4,189,301** |

# Awards Implemented During the Year Ending March 31

(The following includes both new and continuing awards. The numbers in brackets indicate the new awards.)

| | 1987 | 1988 | 1989 |
|---|---|---|---|
| **Heritage Scholarship** | | | |
| U of A | 29 (7) | 30 (5) | 34 (9) |
| U of C | 53 (6) | 55 (5) | 58 (4) |
| Others | – (1) | 1 (–) | 1 (1) |
| **Total** | **82 (14)** | **86 (10)** | **93 (14)** |
| **Heritage Scientist** | | | |
| U of A | 2 (1) | 3 (1) | 4 (3) |
| U of C | 8 (–) | 8 (–) | 8 (3) |
| Others | 1 (–) | 1 (–) | 1 (–) |
| **Total** | **11 (1)** | **12 (1)** | **13 (6)** |
| **Clinical Investigatorship** | | | |
| U of A | 4 (3) | 5 (2) | 8 (3) |
| U of C | 2 (2) | 4 (3) | 7 (2) |
| **Total** | **6 (5)** | **9 (5)** | **15 (5)** |
| **Full-Time Fellowship** | | | |
| U of A | 71 (29) | 53 (19) | 41 (13) |
| U of C | 51 (30) | 46 (23) | 43 (13) |
| Others | 23 (10) | 23 (15) | 21 (7) |
| **Total** | **145 (69)** | **122 (57)** | **105 (33)** |
| **Part-Time Fellowship** | | | |
| U of A | 1 (–) | 1 (3) | 2 (–) |
| U of C | 1 (1) | 1 (1) | 1 (–) |
| **Total** | **2 (1)** | **2 (4)** | **3 (–)** |

# Awards Implemented During the Year Ending March 31

(The following includes both new and continuing awards. The numbers in brackets indicate the new awards.)

| | 1987 | 1988 | 1989 |
|---|---|---|---|
| **Clinical Fellowship** | | | |
| U of A | 3 (5) | 5 (1) | 2 (2) |
| U of C | 7 (7) | 10 (7) | 9 (1) |
| Others | 9 (5) | 8 (7) | 12 (3) |
| **Total** | **19 (17)** | **23 (15)** | **23 (6)** |
| **Clinical Traineeship** | | | |
| U of C | – (–) | – (–) | – (1) |
| **Full-Time Studentship** | | | |
| U of A | 91 (28) | 73 (17) | 60 (38) |
| U of C | 77 (28) | 72 (28) | 63 (25) |
| Others | 3 (–) | 2 (–) | 1 (–) |
| **Total** | **171 (56)** | **147 (45)** | **124 (63)** |
| **Part-Time Studentship** | | | |
| U of A | 3 (1) | 3 (2) | 2 (1) |
| U of C | 1 (1) | – (–) | – (–) |
| **Total** | **4 (2)** | **3 (2)** | **2 (1)** |
| **Independent Research Allowance — Fellowship** | | | |
| U of A | – (2) | 1 (2) | 1 (–) |
| U of C | 3 (3) | 3 (3) | 3 (–) |
| Others | 4 (2) | 4 (–) | 3 (–) |
| **Total** | **7 (7)** | **8 (5)** | **7 (–)** |
| **Independent Research Allowance — Studentship** | | | |
| U of A | 10 (8) | 6 (3) | 7 (–) |
| U of C | 7 (6) | 5 (1) | 2 (–) |
| Others | 1 (–) | – (–) | – (–) |
| **Total** | **18 (14)** | **11 (4)** | **9 (–)** |

# Awards Implemented During the Year Ending March 31

(The following are one time, non-renewable awards.)

| | 1987 | 1988 | 1989 |
|---|---|---|---|
| **Independent Establishment Grant** | | | |
| U of A | 2 | 7 | 7 |
| U of C | 3 | – | 2 |
| Others | – | – | 1 |
| **Total** | **(5)** | **(7)** | **(10)** |
| | | | |
| **Summer Studentship** | | | |
| U of A | 93 | 111 | 92 |
| U of C | 67 | 75 | 45 |
| Others | 3 | 3 | – |
| **Total** | **163** | **189** | **137** |
| | | | |
| **Conference Grant** | | | |
| U of A | 11 | 6 | 9 |
| U of C | 16 | 2 | 4 |
| Others | 1 | 2 | – |
| **Total** | **28** | **10** | **13** |
| | | | |
| **Major Equipment** | | | |
| U of A | 23 | 8 | 5 |
| U of C | 15 | 4 | 12 |
| Others | – | 2 | – |
| **Total** | **38** | **14** | **17** |
| | | | |
| **Technology Transfer — Phase 1** | | | |
| U of A | 1 | – | 1 |
| U of C | 2 | 3 | 2 |
| Others | – | – | 4 |
| **Total** | **3** | **3** | **7** |

(The following are one time, non-renewable awards.)

| | 1987 | 1988 | 1989 |
|---|---|---|---|
| **Technology Transfer - Phase II** | | | |
| U of A | 1 | 1 | – |
| U of C | 2 | – | 2 |
| Others | 1 | – | 1 |
| **Total** | **4** | **1** | **3** |
| | | | |
| **Visiting Professor** | | | |
| U of A | 5 | 2 | 2 |
| U of C | – | 1 | 1 |
| Others | – | 1 | – |
| **Total** | **5** | **4** | **3** |
| | | | |
| **Visiting Scientist to Alberta** | | | |
| U of A | 1 | 4 | 6 |
| U of C | 3 | 2 | 2 |
| Others | – | – | – |
| **Total** | **4** | **6** | **8** |
| | | | |
| **Visiting Scientist from Alberta** | | | |
| U of A | – | – | – |
| U of C | – | 2 | 1 |
| Others | – | – | – |
| **Total** | **–** | **2** | **1** |

| 1987 | | | |
|---|---|---|---|
| | Applications Received | Applications Approved | Percent Approved |
| Full-Time Studentship | 173 | 83 | 48 |
| Part-Time Studentship | 4 | 3 | 75 |
| Summer Studentship | 280 | 166 | 59 |
| Full-Time Fellowship | 185 | 83 | 45 |
| Part-Time Fellowship | 4 | 2 | 50 |
| Independent Research Allow-Studentship | 9 | 6 | 67 |
| Independent Research Allow-Fellowship | 8 | 7 | 88 |
| Scholarship/Establishment | 45 | 19 | 42 |
| Independent Establishment | 16 | 9 | 56 |
| Clinical Fellowship | 28 | 15 | 54 |
| Clinical Investigatorship | 10 | 5 | 50 |
| Heritage Scientist | 5 | 3 | 60 |
| Major Equipment | 78 | 44 | 56 |
| Conference Grant | 32 | 12 | 38 |
| Visiting Professor | 1 | 1 | 100 |
| Visiting Scientist to Alberta | 13 | 5 | 38 |
| Visiting Scientist from Alberta | 5 | 2 | 40 |
| Technology Transfer Phase I | 13 | 4 | 31 |
| Technology Transfer Phase II | 8 | 4 | 50 |
| Clinical Traineeship | – | – | – |

| 1988 | | | |
|---|---|---|---|
| | Applications Received | Applications Approved | Percent Approved |
| Full-Time Studentship | 202 | 52 | 26 |
| Part-Time Studentship | 2 | 0 | 0 |
| Summer Studentship | 325 | 146 | 45 |
| Full-Time Fellowship | 195 | 31 | 16 |
| Part-Time Fellowship | 3 | 1 | 33 |
| Independent Research Allow-Studentship | – | – | – |
| Independent Research Allow-Fellowship | – | – | – |
| Scholarship/Establishment | 26 | 10 | 39 |
| Independent Establishment | 10 | 6 | 60 |
| Clinical Fellowship | 30 | 11 | 37 |
| Clinical Investigatorship | 10 | 6 | 60 |
| Heritage Scientist | 10 | 4 | 40 |

| 1988 continued | | | |
|---|---|---|---|
| | **Applications Received** | **Applications Approved** | **Percent Approved** |
| Major Equipment | 70 | 17 | 24 |
| Conference Grant | 15 | 11 | 73 |
| Visiting Professor | 5 | 4 | 80 |
| Visiting Scientist to Alberta | 13 | 6 | 46 |
| Visiting Scientist from Alberta | 4 | 1 | 25 |
| Technology Transfer Phase I | 9 | 4 | 44 |
| Technology Transfer Phase II | 11 | 2 | 18 |
| Clinical Traineeship | – | – | – |

| 1987 | | | |
|---|---|---|---|
| | **Applications Received** | **Applications Approved** | **Percent Approved** |
| Full-Time Studentship | 165 | 56 | 34 |
| Part-Time Studentship | 5 | 1 | 20 |
| Summer Studentship | 237 | 147 | 62 |
| Full-Time Fellowship | 169 | 63 | 37 |
| Part-Time Fellowship | 3 | 0 | 0 |
| Independent Research Allow-Studentship | – | – | – |
| Independent Research Allow-Fellowship | – | – | – |
| Scholarship/Establishment | 30 | 10 | 33 |
| Independent Establishment | 18 | 7 | 39 |
| Clinical Fellowship | 23 | 8 | 35 |
| Clinical Investigatorship | 9 | 5 | 56 |
| Heritage Scientist | 6 | 5 | 83 |
| Major Equipment | 55 | 5 | 9 |
| Conference Grant | 19 | 13 | 68 |
| Visiting Professor | 1 | 1 | 100 |
| Visiting Scientist to Alberta | 9 | 5 | 56 |
| Visiting Scientist from Alberta | 1 | 0 | 0 |
| Technology Transfer Phase I | 6 | 5 | 83 |
| Technology Transfer Phase II | 3 | 2 | 67 |
| Clinical Traineeship | 1 | 1 | 100 |

**Dr. W.L. Albritton**, Professor and Head, Faculty of Medicine (Microbiology), U of Sask.
**Dr. R. Anderson**, Associate Professor, Faculty of Medicine (Microbiology & Infectious Diseases), U of C
**Dr. A. Angel**, Professor and Director, Institute of Medical Science, U of T
**Dr. M. Bentley**, Associate Professor, Faculty of Science (Biological Sciences), U of C
**Dr. P. Codding**, Associate Professor, Faculty of Science (Chemistry), U of C
**Dr. C.B. Frank**, Associate Professor, Faculty of Medicine (Surgery), U of C
**Dr. A. French**, Professor, Faculty of Medicine (Physiology), U of A
**Dr. H. Friesen**, Professor and Head, Faculty of Medicine (Physiology), U of M
**Dr. M. Fritzler**, Professor, Faculty of Medicine (Medicine & Medical Biochemistry), U of C
**Dr. W. Giles**, Professor, Faculty of Medicine (Medicine and Medical Physiology), U of C
**Dr. P. Halloran**, Professor, Faculty of Medicine (Nephrology), U of A
**Dr. M. Halperin**, Professor, Faculty of Medicine, U of T
**Dr. J. Hogg**, Professor, Faculty of Medicine (Pathology), UBC
**Dr. K. Iatrou**, Associate Professor, Faculty of Medicine (Medical Biochemistry), U of C
**Dr. F. Jamali**, Associate Professor, Faculty of Pharmacy, U of A
**Dr. S. Jensen**, Associate Professor, Faculty of Medicine (Microbiology), U of A
**Dr. C. Kay**, Professor, Faculty of Medicine (Biochemistry), U of A
**Dr. B. Kolb**, Professor, Faculty of Medicine (Psychology) U of L
**Dr. P. Lee**, Associate Professor, Faculty of Medicine (Microbiology & Infectious Diseases), U of C
**Dr. C. Lord**, Associate Professor, Faculty of Medicine (Pediatrics), U of A and Glenrose Hospital
**Dr. K. MacCannell**, Professor, Faculty of Medicine (Pharmacology & Therapeutics), U of C
**Dr. A. Matheson**, Dean of Science, Professor, Faculty of Medicine Biochemistry & Microbiology), U of V
**Dr. G. McFadden**, Professor, Faculty of Medicine (Biochemistry), U of A
**Dr. H. McLennan**, Professor, Faculty of Medicine (Physiology), U of BC
**Dr. R. Murphy**, Professor and Chairman, Faculty of Medicine (Anatomy & Cell Biology), U of A
**Dr. F. Nargang**, Associate Professor, Faculty of Science (Genetics), U of A
**Dr. S. Newman**, Associate Professor, Faculty of Medicine (Psychiatry), U of A
**Dr. M. Palcic**, Assistant Professor, Faculty of Agriculture & Forestry (Food Science), U of A
**Dr. M. Paterson**, Professor, Faculty of Medicine (Biochemistry) and Director, Molecular Genetics and Carcinogenesis lab, U of A, Cross Cancer Institute
**Dr. K. Pearson**, Professor, Faculty of Medicine (Physiology), U of A
**Dr. A Prochazka**, Professor, Faculty of Medicine (Neurosciences), U of A
**Dr. R. Rajotte**, Professor, Faculty of Medicine (Surgery & Clinical Surgery), U of A
**Dr. J. Raymond**, Associate Professor, Faculty of Social Sciences (Psychology), U of C
**Dr. T. Reh**, Assistant Professor, Faculty of Medicine (Medical Physiology), U of C
**Dr. R. Reithmeier**, Associate Professor, MRC Group in Membrane Biology, U of T
**Dr. J. Remmers**, Professor, Faculty of Medicine (Medicine & Medical Physiology), U of C
**Dr. O. Rorstad**, Professor, Faculty of Medicine (Medicine), U of C
**Dr. W. Schneider**, Associate Professor, Faculty of Medicine (Biochemistry), U of A
**Dr. P. Schnetkamp**, Assistant Professor, Faculty of Medicine (Medical Biochemistry), U of C
**Dr. B. Singh**, Professor and Acting Chairman, Faculty of Medicine (Immunology), U of A
**Dr. E. Smith**, Professor & Head, Faculty of Medicine (Medicine), U of C
**Dr. F. Snyder**, Associate Professor, Faculty of Medicine (Pediatrics) U of C
**Dr. R. Stein**, Professor, Faculty of Medicine (Physiology), U of A
**Dr. D. Taylor**, Professor, Faculty of Science (Medical Microbiology & Infectious Diseases) U of A
**Dr. H. ter Keurs**, Professor, Faculty of Medicine (Medicine & Medical Physiology), U of C
**Dr. D.L. Tyrrell**, Chairman & Professor, Faculty of Medicine (Medical Microbiology & Infectious Diseases and Medicine), U of A
**Dr. J. Van de Sande**, Professor and Head, Faculty of Medicine (Medical Biochemistry), U of C
**Dr. M. Walsh**, Associate Professor, Faculty of Medicine (Medical Biochemistry), U of C
**Dr. G. Warnock**, Associate Professor, Faculty of Medicine (Surgery), U of A
**Dr. J. Weiner**, Professor, Faculty of Science (Biochemistry), U of A
**Dr. W. Wenman**, Professor, Faculty of Medicine (Pediatrics), U of A
**Dr. W. Whitelaw**, Professor, Faculty of Medicine (Medicine), U of C
**Dr. M. Yeung**, Professor, Faculty of Medicine (Medicine), UBC

ALBERTA HERITAGE FOUNDATION FOR MEDICAL RESEARCH

# FINANCIAL STATEMENTS

MARCH 31, 1989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Statement of Revenue Surplus/*22*
Notes to the Financial Statements/*23*
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**To the Trustees of the Alberta Heritage Foundation for Medical Research**

I have examined the balance sheet of the Alberta Heritage Foundation for Medical Research as at March 31, 1989 and the statements of revenue and expenditure and revenue surplus for the year then ended. My examination was made in accordance with generally accepted auditing standards, and accordingly included such tests and other procedures as I considered necessary in the circumstances.

In my opinion, these financial statements present fairly the financial position of the Foundation as at March 31, 1989 and the results of its operations and the changes in its financial position for the year then ended in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Donald D Salmon

FCA
Auditor General

Edmonton, Alberta
August 23, 1989

ALBERTA HERITAGE FOUNDATION FOR MEDICAL RESEARCH

# BALANCE SHEET

AS AT MARCH 31, 1989

| | 1989 | 1988 |
|---|---|---|
| **ASSETS** | | |
| Cash | $5,669,641 | $6,282,595 |
| Accounts receivable (Note 4) | 369,250 | 227,764 |
| Advances and prepaid expenses (Note 3) | 231,685 | 2,005,784 |
| Mortgages receivable from research scientists | 504,261 | 542,595 |
| Fixed assets | 138,480 | 184,363 |
| | **$6,913,317** | **$9,243,101** |
| **LIABILITIES AND SURPLUS** | | |
| Accounts payable | $1,763,876 | $1,349,342 |
| Revenue surplus | 5,149,441 | 7,893,759 |
| | **$6,913,317** | **$9,243,101** |

The accompanying notes are part
of these financial statements.

# STATEMENT OF REVENUE AND EXPENDITURE

FOR THE YEAR ENDED MARCH 31, 1989



| | 1989 | 1988 |
|---|---|---|
| **REVENUE** | | |
| Transfers from the Alberta Heritage Foundation for Medical Research Endowment Fund | $34,000,000 | $58,000,000 |
| Interest | 777,015 | 894,610 |
| | 34,777,015 | 58,894,610 |
| **EXPENDITURE** | | |
| Scientific programs: | | |
| Scholarship and establishment grants | 8,423,057 | 8,558,838 |
| Building program grants | 5,068,530 | 17,099,290 |
| Fellowship grants and research allowances | 4,415,232 | 5,587,655 |
| Studentship grants and research allowances | 3,175,545 | 3,721,790 |
| Heritage medical scientist grants | 2,869,548 | 1,954,393 |
| Research support costs | 2,467,467 | 2,523,851 |
| Clinical investigatorship grants | 1,838,173 | 1,653,267 |
| Independent establishment grants | 1,572,835 | 1,734,557 |
| Institutional grants | 1,391,615 | 960,106 |
| Clinical fellowship grants | 1,289,717 | 1,597,927 |
| Major equipment and maintenance grants | 1,270,681 | 2,292,672 |
| Technical workshop grants | 506,928 | 181,900 |
| Special initiative grants | 419,705 | 442,636 |
| Technology transfer grants | 323,336 | 185,049 |
| Visiting lecturer grants to universities | 312,868 | 362,346 |
| Travel grants to universities | 249,203 | 246,269 |
| Library grants | 144,571 | 118,300 |
| Visiting scientist grants | 128,712 | 159,876 |
| Conference support grants | 113,790 | 129,657 |
| Computer grants | 100,000 | 100,000 |
| Independent research allowances | 45,945 | 98,614 |
| Clinical trainee grants | 34,500 | - |
| Recruitment and planning grants to universities | 20,613 | 30,889 |
| Visiting professor honoraria and travel grants | 4,938 | 9,250 |
| | 36,187,509 | 49,749,132 |
| Administration expenses, Schedule 1 | 1,076,110 | 1,064,812 |
| Scientific Advisory Council expenses | 52,331 | 139,827 |
| Trustee expenses | 109,413 | 112,647 |
| Other committee expenses | 95,970 | 100,748 |
| | **37,521,333** | **51,167,166** |
| Excess (deficiency) of revenue over expenditure for the year | **$(2,744,318)** | **$ 7,727,444** |

# STATEMENT OF REVENUE SURPLUS

FOR THE YEAR ENDED MARCH 31, 1989

| | 1989 | 1988 |
|---|---|---|
| Revenue surplus at beginning of year | $ 7,893,759 | $ 166,315 |
| Excess (deficiency) of revenue over expenditure for the year | (2,744,318) | 7,727,444 |
| **Revenue surplus at end of year** | **$ 5,149,441** | **$7,893,759** |

# NOTES TO THE FINANCIAL STATEMENTS

## Note 1

### Authority

The Alberta Heritage Foundation for Medical Research operates under the authority of the Alberta Heritage Foundation for Medical Research Act, Chapter A-26, Revised Statutes of Alberta 1980, as amended.

## Note 2

### Significant Accounting Policies and Reporting Practices

**Fixed Assets:**
Fixed assets are stated at cost less accumulated depreciation and amortization.

**Changes in Financial Position:**
A statement of changes in financial position is not provided as disclosure in these financial statements is considered to be adequate.

**Scientific Program Expenditures:**
Building program grants are reported as expenditure as costs are incurred. Other grants and allowances awarded by the Trustees of the Foundation are recorded as expenditure when the awardee has been notified of the amount of the award and all terms and conditions of eligibility for payment of the award have been met.

## Note 3

### Alberta Heritage Foundation for Medical Research Endowment Fund

The Endowment Fund operates pursuant to the Alberta Heritage Foundation for Medical Research Act and consists of an initial endowment of $300,000,000 from the Alberta Heritage Savings Trust Fund together with cumulative earnings thereon, less cumulative transfers to the Foundation.

Transfers to the Foundation are available upon request provided the payment of such transfers would not result in the net assets of the Endowment Fund, as valued on a cost basis, being less than the initial endowment.

The net assets of the Endowment Fund at March 31, 1989, as valued on a cost basis, amounted to approximately $456,000,000 and on a market value basis, to approximately $472,000,000.

## Note 4

### Accounts Receivable

| | 1989 | 1988 |
|---|---|---|
| Unexpended grants held by universities: | | |
| Travel | $126,664 | $130,167 |
| Visiting lecturers | 130,531 | 81,100 |
| | 257,195 | 211,267 |
| Other | 112,055 | 16,497 |
| | **$369,250** | **$227,764** |

## Note 5

### Advances and Prepaid Expenses

| | | |
|---|---|---|
| Advances on building program grants | $221,243 | $1,991,084 |
| Prepaid administration expenses | 10,442 | 14,700 |
| | **$231,685** | **$2,005,784** |

## Note 6

### Commitments

As at March 31, 1989 the Foundation had committed $44,955,688 for scientific programs:

| | |
|---|---|
| Scholarship and establishment grants | $18,482,268 |
| Heritage medical scientist grants | 7,512,404 |
| Research support costs | 4,306,544 |
| Building program grants | 3,989,393 |
| Clinical investigatorship grants | 3,171,598 |
| Fellowship grants and research allowances | 2,392,103 |
| Studentship grants and research allowances | 2,111,304 |
| Independent establishment grants | 975,563 |
| Clinical fellowship grants | 545,658 |
| Special initiative grants | 260,522 |
| Major equipment and maintenance grants | 251,551 |
| Institutional grants | 214,979 |
| Visiting scientist grants | 37,302 |
| Conference support grants | 17,161 |
| Other grants and allowances | 687,338 |
| | **$44,955,688** |

## Note 6

### Commitments (continued)

These commitments pertain to the following fiscal years:

| | |
|---|---|
| 1989-90 | $23,847,827 |
| 1990-91 | 9,383,659 |
| 1991-92 | 6,010,484 |
| 1992-93 | 3,823,274 |
| 1993-94 | 1,599,557 |
| 1994-95 | 290,887 |
| | **$44,955,688** |

## Note 7

### Pension Plan

The Foundation's pension plan is a defined benefit plan. Benefits are based on years of service and average salary in the final years of employment.

The plan status as at March 31, 1989 is as follows:

| | |
|---|---|
| Assets | $366,500 |
| Less: Actuarial value of accrued pension benefits | 244,600 |
| Excess balance | **$121,900** |

## Note 8

### Comparative Figures

The 1988 figures have been reclassified where necessary to conform to 1989 presentation.

## Note 9

### Approval of Financial Statements

These financial statements were reviewed by the Audit Committee and recommended to the Trustees for their approval.

Schedule 1

ALBERTA HERITAGE FOUNDATION FOR MEDICAL RESEARCH

# SCHEDULE OF ADMINISTRATION EXPENSES

FOR THE YEAR ENDED MARCH 31, 1989

| | 1989 | 1988 |
|---|---|---|
| Salaries | $ 546,089 | $ 532,420 |
| Rental of premises | 117,920 | 114,597 |
| Depreciation and amortization | 62,735 | 59,942 |
| Employee benefits | 55,148 | 70,013 |
| Consultancy | 53,470 | 33,035 |
| Stationery, printing and office supplies | 49,936 | 49,191 |
| Public relations and advertising | 40,935 | 77,087 |
| Maintenance | 29,323 | 31,033 |
| Travel and accommodation | 27,670 | 20,770 |
| Postage and courier | 21,246 | 19,238 |
| Legal | 20,380 | 7,650 |
| Vehicle | 17,762 | 16,661 |
| Insurance | 16,625 | 18,818 |
| Telephone | 14,755 | 13,377 |
| Staff Training | – | 283 |
| Miscellaneous | 2,116 | 697 |
| | **$1,076,110** | **$1,064,812** |